

**ABSTRACT OF THE DISCLOSURE**

[0045] A superconducting tape is disclosed, including a substrate, a buffer layer overlying the substrate, a superconductor layer overlying the buffer layer, and an electroplated stabilizer layer overlying the superconductor layer. Also disclosed are components incorporating superconducting tapes, methods for manufacturing same, and methods for using same. The tape provides for low AC losses, and is particularly suitable for deployment in components where attenuation of AC losses is important, such as in rotating machines.